



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,372	12/15/2003	Michael Frantzen	81044411 (202-1427)	1826
22844	7590	05/30/2006		EXAMINER
				BROWN, DREW J
			ART UNIT	PAPER NUMBER
			3616	

DATE MAILED: 05/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/735,372	FRANTZEN ET AL.	
	Examiner	Art Unit	
	Drew J. Brown	3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 10 April 2006.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-7, 10 and 11 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-7, 10 and 11 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date. ____ .
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ . 5) Notice of Informal Patent Application (PTO-152)
6) Other: ____ .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 5-7, 10, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Stinson (U.S. Pat. No. 4,784,406).

With respect to claim 1, Stinson discloses a steering swivel (element outside of knuckle in Figure 1 and column 5, lines 51-60) supporting a wheel, a beam (knuckle in between the control arms 20 in Figure 1) on which the steering swivel is mounted such that the steering swivel is rotatable about a steering axis, a suspension leg (14) having a lower end rigidly connected to the beam and supported on the bodywork, a link (20) coupled to the bodywork and connected to the beam, and a stabilizer (22) coupled to the suspension leg via arm (26).

With respect to claim 2, the stabilizer is coupled to the suspension leg by an elastic bearing (24).

With respect to claim 3, the stabilizer is coupled to the suspension leg by a ball and socket joint (40).

With respect to claim 5, the suspension leg is arranged in a position which is tilted with respect to the vertical (Figure 2).

With respect to claim 6, the suspension leg and the steering axis lie in a common plane (Figure 2).

With respect to claim 7, the link is attached to the bodywork by at least one hinged joint (Figure 1).

With respect to claim 10, the suspension leg comprises a damper strut (column 3, lines 53-56).

With respect to claim 11, the suspension leg comprises a helical coil (16).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 4 is rejected under 35 U.S.C. 102(b) as being anticipated by Stinson in view of Murakami et al. (U.S. Pat. No. 4,883,287).

Stinson discloses the claimed invention as discussed above but does not disclose that the link is attached to the beam by a ball-and-socket joint. Murakami et al., however, does disclose that that the link is attached to the beam by ball and socket joint (26 in Figure 1).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Stinson in view of the teachings of Murakami et al. to use a ball and socket connection since one of ordinary skill in the art would have found it obvious to substitute ball and socket connections for pin type connections.

5. Claims 1, 2, 5-7, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Müller (U.S. Pat. No. 3,831,970) in view of Stinson (U.S. Pat. No. 4,784,406).

With respect to claim 1, Müller discloses a steering swivel (element outside of beams 2 inside wheels 1) supporting a wheel, a beam (2) on which the steering swivel is mounted such that the steering swivel is rotatable about a steering axis, a suspension leg (15) connected to the beam and supported on the bodywork, a link (3) coupled to the bodywork and connected to the beam, and a stabilizer (8) coupled to the beam via arm (7).

Müller does not disclose that the suspension leg has a lower end that is rigidly connected to the beam at an upper end. Stinson, however, does disclose a suspension leg (15) that has a lower end rigidly attached to a beam (knuckle in between the control arms 20 in Figure 1).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Müller in view of the teachings of Stinson to rigidly attach the suspension leg to the beam in order to reduce the cost of manufacturing and

assembling the suspension system because additional pin-type connections that allow the suspension leg to pivot are not necessary.

With respect to claim 2, Müller discloses that the stabilizer is coupled to the beam by an elastic bearing (10).

With respect to claim 5, Müller discloses that the suspension leg is arranged in a position which is tilted with respect to the vertical (Figure 2).

With respect to claim 6, Müller discloses that the suspension leg and the steering axis lie in a common plane (Figure 1).

With respect to claim 7, Müller discloses that the link is attached to the bodywork by at least one hinged joint (A₁).

With respect to claim 10, Müller discloses that the suspension leg comprises a damper strut (column 4, lines 65-67 and column 5, lines 1-6).

With respect to claim 11, Stinson discloses that the suspension leg comprises a helical coil (16).

6. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murakami et al. in view of Stinson (U.S. Pat. No. 4,784,406).

With respect to claim 1, Murakami et al. discloses a steering swivel (element outside of shaft 20) supporting a wheel, a beam (12) on which the steering swivel is mounted such that the steering swivel is rotatable about a steering axis, a suspension leg (32) connected to the beam and supported on the bodywork, a link (28) coupled to the bodywork and connected to the beam, and a stabilizer (70) coupled to the suspension leg.

Murakami et al. does not disclose that the suspension leg has a lower end that is rigidly connected to the beam at an upper end. Stinson, however, does disclose a suspension leg (15) that has a lower end rigidly attached to a beam (knuckle in between the control arms 20 in Figure 1).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Murakami et al. in view of the teachings of Stinson to rigidly attach the suspension leg to the beam in order to reduce the cost of

manufacturing and assembling the suspension system because additional pin-type connections that allow the suspension leg to pivot are not necessary.

With respect to claim 2, Murakami et al. discloses that the stabilizer is coupled to the suspension leg by an elastic bearing (78a and 78b in Figure 4).

With respect to claim 3, Murakami et al. discloses that the stabilizer is coupled to the suspension leg by ball and socket joint (72' in Figure 6).

With respect to claim 4, Murakami et al. discloses that the link is attached to the beam by ball and socket joint (26 in Figure 1).

With respect to claim 5, Murakami et al. discloses that the suspension leg is arranged in a position which is tilted with respect to the vertical (Figure 1).

With respect to claim 6, Murakami et al. discloses that the suspension leg and the steering axis lie in a common plane (Figure 1).

With respect to claim 7, Murakami et al. discloses that the link is attached to the bodywork by at least one hinged joint (30).

Response to Arguments

7. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Drew J. Brown whose telephone number is 571-272-1362. The examiner can normally be reached on Monday-Thursday from 8 a.m. to 4 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul N. Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Drew J. Brown
Examiner
Art Unit 3616

db
5/24/06



DAVID R. DUNN
PRIMARY EXAMINER